PACKER CREEK ENVIRONMENTAL ASSESSMENT OR 135-01-EA-09 & ALLOTMENT MANAGEMENT PLAN Allotment #00698

Bureau of Land Management Spokane District July 2001

PROPOSED DECISION AND FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Dear Interested Public:

The following Proposed Decision and Finding of No Significant Impact for the Environmental Analysis of the proposed Packer Creek Allotment Management Plan is enclosed for your review. If you wish to protest or appeal this proposed decision, you may do so in accordance with the procedures described below.

PROPOSED DECISION

<u>Proposed Decision</u>: Under the authority of the Code of Federal Regulations (43 CFR 4120.2[c] and [d], 43 CFR 4130.2[a] and [d], and 43 CFR 4160.1[a]), it is my proposed decision to adopt and implement Alternative 2 (Proposed Action), and to issue a 10-year grazing lease with the Proposed Action as a term and condition of the grazing lease.

Rationale: The proposed allotment management plan is in conformance with the Record of Decision (ROD) for the Spokane Resource Management Plan and amendments. The ROD (p. i) specified that livestock grazing focus on achieving 50 percent utilization of key forage species through the development of Allotment Management Plans (AMPs) to establish livestock use levels, grazing systems, seasons of use, and range improvements. This AMP also addresses the requirement to take actions to achieve Standards for Rangeland Health (43 CFR 4180.2). Management goals for this area are to enhance native riparian and sagebrush steppe habitat, enhance opportunities for wildlife-based recreation, identify and protect significant cultural values, and protect significant sensitive species habitat (Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement 1992, p. 8). These goals are supported through intensive livestock management (Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement 1992, p. 13).

FONSI

On the basis of environmental assessment #OR135-01-EA-09 and other available information, it is my determination that Alternative 2 (Proposed Action) does not constitute a major federal action significantly affecting the quality of the human environment (a finding of no significant impact). Therefore, this action does not require preparation of an environmental impact statement.

PROTEST

If you wish to protest this proposed decision in accordance with 43 CFR § 4160.2, you are allowed 15 days from receipt of this notice to file a protest at the above address. A protest must be in writing and specify the reasons, clearly and concisely, as to why you believe the proposed decision is in error. If a protest is filed within the time allowed, the statement of reason and other pertinent information will be considered and a final decision will be issued with a right of appeal (43 CFR 4160.3[b]).

In the absence of a protest within the time allowed, the above proposed decision will constitute my final decision without further notice in accordance with 43 CFR § 4160.3[a]. If this becomes my final decision and you wish to appeal this decision for the purpose of a hearing before an Administrative Law Judge, in accordance with 43 CFR §§ 4160.4 and 4.470, you are allowed 45 days from receipt of this notice to file an appeal at the above address. The appeal must be in writing and shall state clearly and concisely why you think the decision is in error. Any request for a stay of this decision in accordance with 43 CFR § 4.21 must be filed with the appeal.

/s/ Kevin R. Devitt
Kevin R. Devitt
Field Manager, Border Resource Area

7/24/01

Date

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Packer Creek Environmental Assessment (EA#OR135-01-EA-09) Allotment Management Plan (Allotment #00698)

Introduction

The allotment consists of seven pastures totaling 1,652 acres, including approximately 2 miles of Packer Creek. Adjacent to Packer Creek is a sizeable wetland area, as well as several natural and man made ponds. This allotment is located in Whitman County near the Rock Creek Management Unit, 40 miles southwest of Spokane, Washington. This allotment is within the Border Resource Area of the Bureau of Land Management (BLM) Spokane District (see map).

Purpose and Need

The purpose of this assessment is to address issuance of a 10-year lease for livestock grazing on the Packer Creek Allotment (00698). Management goals consistent with the multiple use objectives of livestock forage production, wildlife habitat and watershed needs as outlined by the Spokane Resource Management Plan Record of Decision (ROD) 1987 are incorporated into this document. The ROD specifies that Allotment Management Plans (AMPs) will be developed to establish livestock use levels, grazing systems, seasons of use, and the need for range improvements.

There is potential on this allotment to improve rangeland, riparian areas, and wildlife habitat, as described in this document. This allotment management plan proposes grazing use consistent with goals to improve or maintain existing conditions.

Background

Prior to acquisition by BLM in 1997, the area received moderate use by cattle in the spring, summer, and fall. Areas of the allotment were modified to raise agricultural crops and were also manipulated to provide water for irrigation and flood control practices.

Alternatives

Alternative 1 - Continue Present Grazing System (Interim Management)

Rotational grazing would occur annually at an intensity of 642 AUMs by cattle and/or horses between April 15 and December 15 and within the parameters identified below in the section titled "Management Actions Common to Alternatives 1 and 2." Timing dates and livestock numbers would be decided annually based on BLM monitoring results, professional judgements, and consultation with the grazing lessee. Grazing in any one pasture would occur no more than one out of three years during the critical growth period of bluebunch wheatgrass (beginning approximately April 20).

Alternative 2 - Existing Grazing Plan With Improvements (Proposed Action)

The grazing levels and times would be the same as in Alternative 1. Proposed Range Improvements are identified below.

The hydrology of Packer Creek and associated wetland complexes will be restored, as described below, to achieve Proper Functioning Condition (PFC) and allow for successional adjustments towards Potential Natural Community (PNC).

<u>Proposed Water Feature Improvements:</u>

- Ditches along Packer Creek in Pastures 5, 6, and 7 will be backfilled.
- A control feature in Pasture 6 will be reconstructed to protect private property downstream and allow safe passage of water into both Packer Creek and the associated wetland complexes.
- In Pastures 1 and 4, features such as inlets, outlets, road crossings and flow controls will be repaired or installed at appropriate locations so that water storage occurs seasonally and that release during high flow periods occurs without risk of erosion (headcutting).

The Joint Aquatic Resource Permit Application (JARPA) process, administered by the Washington Department of Fish and Wildlife, will provide the design specifics for features involved in the restoration process.

Alternative 3 - No Grazing

The grazing lease would not be issued, and no livestock would graze under Alternative 3. No range improvements would be constructed. The BLM-administered lands would be fenced separately from private lands.

Management Actions/Project Design Features Common to Alternatives 1 and 2

Range Improvements

- Additional range improvements will be constructed, based on monitoring, to achieve or maintain rangeland health standards as required by 43 Code of Federal Regulations, Subpart 4180 (Rangeland Health). Range improvements include any project or construction activity occurring within the rangeland ecosystem that is designed to achieve or maintain Rangeland Health Standards as described in Standards for Rangeland Health and Guidelines for Grazing Management (USDI 1997).
- The grazing lessee will maintain all range improvements. The BLM may contribute materials, if available, for major repair work.

Noxious Weed and Invasive Plants

 Noxious weeds/invasive plants on the allotment will be treated in accordance with the Spokane District Noxious Weed Control Environmental Assessment.

Monitoring and Evaluation:

- Upland cover and plant species composition will be monitored using the existing photo points (3-foot square photo plots and general view photos) and 100-foot transect baselines.
- Additional photo monitoring will be established in the allotment to monitor hardwood/shrub trend.
 This would be used to determine site potential and site capability criteria of shrubs and hardwood species.
- Utilization levels of key upland native plant species by weight will also be monitored using the
 Ocular Estimate Method. In addition, utilization of the entire pasture will be estimated using
 Utilization Pattern Mapping. Herbaceous stubble height in riparian areas and wetlands would be
 measured using the Photographic Guide to Median Stubble Heights technique (USDI 1999).
- Riparian "triggers" will be set at a residual median stubble height of 3 inches for wetland (lentic) systems and a median stubble height of 6 inches (at the end of the growing season) for stream/running-water (lotic) systems. Triggers are defined as the criteria that initiates movement of livestock from a given area.
- Upland bunch grasses and Spalding's catchfly sites will be monitored to assess the effects of grazing and to determine any needed changes in management.
- Invasive plant species will be monitored in the vicinity of Spalding's catchfly, and appropriate control measures taken if necessary.
- Other evaluations of the allotment use and resource values, in addition to the Rangeland Health Assessment, will be conducted, as needed, after reviewing the monitoring reports.
- Appropriate resource inventories (including cultural, botanical and wildlife) will be conducted prior to implementing specific projects on the allotment. If any important resources are located, the project will be redesigned to reduce or eliminate impacts to those resources. For cultural sites that cannot be avoided, consultation will be conducted with the Office of Archaeology and Historic Preservation, tribal governments or historical societies, as appropriate, and in some cases the Advisory Council of Historic Preservation.
- A biological assessment for plants, fish and wildlife for the allotment area will be completed in accordance with Section 7 Endangered Species Act guidelines.

Affected Environment and Environmental Impacts

The allotment was used for the effects analysis as it relates to direct, indirect and cumulative effects of each alternative. The cumulative effects analysis considered the past, present and future actions within the allotment. Reasonable foreseeable future actions considered in the allotment analysis include all forms of recreation (such as fishing, hunting, and hiking), grazing, and vehicular road use. Reasonably foreseeable future actions are those activities that may occur over the next 10 years, the length of the proposed grazing lease.

The following text is presented by affected environment and impacts for each resource value considered in the analysis. The focus is on resources that have potential significant impacts.

Soils and Vegetation

<u>Soils</u>: There are several soil types ranging from shallow, well drained to very deep, well drained throughout the allotment. The soils have differing plant production and hydrologic capabilities and are subject to erosion at differing rates. Throughout the allotment, the soils are relatively stable and productive, and are considered to be functioning. The vegetative community associated with the soils has been altered by past management and supports a variety of native and non-native species. Soil compaction throughout the allotment is isolated to areas such as roads and trails. Overall, the areas of compaction comprise a small percentage of the allotment.

<u>Vegetation/Plant Communities</u>: The Packer Creek parcel is located in a transition area between Daubenmmire's bluebunch wheatgrass - Idaho fescue zone and Idaho fescue/common snowberry zone, and is just south of the threetip sage/Idaho fescue zone. The threetip sage/Idaho fescue community is infrequent, but occurs sporadically on north-facing slopes that have not experienced significant disturbance. Stiff sagebrush/Sandberg's bluegrass occurs on shallow soils.

Cheatgrass, rush skeleton weed, and other non-native species are common in the uplands. Pastures 2, 5, 6 and much of Pasture 7 are dominated by non-natives. The majority of these pastures are in early-seral ecological status. However, on other parts of the property, native bunchgrasses such as Idaho fescue and bluebunch wheatgrass are vigorous. Pasture 3 was rated in late-seral ecological status, whereas the majority of Pasture 1 and parts of Pasture 4 were rated in early-seral ecological status. Several steep north-facing slopes support a healthy threetip sagebrush/Idaho fescue community that includes Spalding's catchfly. In addition, plants used by Native Americans are present in the allotment. Native species restoration and integrated noxious weed management is ongoing within the Packer Creek Allotment.

<u>Special Status Plants</u>: A Special Status plant species occurring on the allotment is Spalding's catchfly, proposed for federal listing as Threatened under the Endangered Species Act, and listed as Threatened by the Washington Department of Natural Resources.

Spalding's catchfly occurs in Pasture 3, the northeastern part of Pasture 7, and the southeastern part of Pasture 4. It is a non-rhizomatous perennial species with annual shoots that appear in June, flower in July and August, and release seed in August or September. The dried shoots often remain standing and identifiable through the fall and early winter. This plant is found on gently to moderately sloping sites, usually with north-facing aspect, which are dominated by Idaho fescue. Threetip sagebrush is often present also. The Spalding's catchfly plants are commonly in scattered groups of 1 to 25 individuals. Spalding's catchfly is known to be dormant for prolonged periods, with individuals appearing absent during one or more entire growing seasons, but reappearing one or more years later. Because of this trait, this species may have fluctuating populations. The condition of key native species, such as Idaho fescue, may be an indicator of habitat suitability for Spalding's catchfly, because the plant is rarely found in degraded areas where native grasses are in poor condition.

<u>Plants of Cultural Importance</u>: Trees and shrubs of cultural significance on the project area include serviceberry, choke cherry, golden currant, wax currant, Wood's rose, and elderberry. Culturally important root crop plants found there include big seed lomatium, nineleaf lomatium, Coeur d'Alene lomatium, swale desert-parsley, yampah, and wild onions.

Impacts on Soils and Vegetation

Actions common to Alternative 1 & 2:

Soil disturbance would occur primarily in areas where livestock congregate. Direct effects to soil may be compaction, displacement and reduction of structure.

The Proposed Action (Alternative 2) is expected to allow upland plant communities to maintain or advance their current ecological status. Populations of native bunch grasses (primarily bluebunch wheatgrass and Idaho fescue) would potentially be maintained or increased.

The overall grazing schedule would be consistent with wetland area management. Soil and bank stability may be temporarily impacted in wetland areas due to the presence of livestock. This proposal should allow for recruitment and proper growth forms of the aspen/shrub communities.

Alternatives 1 and 2. Under a rotational grazing system, cattle may be present in Pastures 3, 4 and 7 during the growth and reproductive periods of Spalding's catchfly. Possible direct effects of livestock grazing on this plant include consumption and trampling of the plants. The plants (other than the rosettes) are covered with glandular hairs and are very sticky, and thereby probably not attractive as forage, but they could be consumed incidentally if cattle are eating neighboring vegetation. Possible indirect effects include soil compaction and damage to soil surface crusts, which could alter water percolation patterns, reduce vigor of other native species, and increase the likelihood of invasion by non-native plants that could compete with the natives. However, it is likely that the effects will be negligible because the sites of Spalding's catchfly populations are on steep slopes and are not close to water, therefore livestock are unlikely to spend significant time in these sites as long as forage is available in more desirable sites.

Furthermore, the grazing rotation and the monitoring of bunchgrass utilization with removal of livestock when utilization thresholds are reached in "typical" upland sites would minimize the probability of such effects. Grazing tends to reduce the accumulation of grass litter, and dense litter can reduce the likelihood of seedling establishment in Spalding's catchfly (Lesica 1994, 1997). Not enough is known about the competitive abilities of Spalding's catchfly relative to other plant species to predict how moderate grazing is likely to affect the competitive balance.

However, conditions that increase the input of seeds of weedy species, or favor their establishment, would likely be detrimental to Spalding's catchfly, as well as to most other native plants.

<u>Alternative 3 (No Grazing)</u>: Impacts to soil and water resources would continue to occur under natural environmental conditions or as a result of previous management and utilization.

It is anticipated that no grazing would allow the upland plant communities to maintain or advance their current ecological status. It is expected that populations of native bunch grasses (primarily bluebunch wheatgrass and Idaho fescue) would be maintained or may increase.

Spalding's catchfly would be likely to be unaffected under this Alternative, although it is possible that at some locations the growth or reproductive success of the plants might be impeded by the accumulation of larger amounts of litter.

Water/Riparian Resources

Packer Creek is currently "functional-at risk" for a variety of reasons. Water withdrawal, agricultural practices, channelization, and past grazing management have all contributed to the current rating.

Impacts on Water Resources

Ponds that have livestock access may temporarily have increased levels of fecal coliform.

The improvements planned under Alternative 2 (Proposed Action) along Packer Creek are expected to restore hydrologic function and eventually attain proper functioning condition. Backfilling the ditches along Packer Creek in Pastures 5, 6, and 7 will allow water access to the floodplain in normal flow events and begin the process of restoring appropriate channel type. Reconstructing the water control feature in Pasture 6 will allow safe passage of water into Packer Creek and associated wetland complexes, which would protect private property values downstream from being flooded/saturated at times.

Wildlife Habitat

This allotment has several plant communities and state priority habitats that provide habitat for various wildlife (see Table 1), including 13 Bureau Special Status Species (SSS). Among these are perennial stream wetlands, aspen/shrub garlands, lentic wetlands, prairie/shrub-steppe, and shrub-steppe. These areas provide a variety of habitat for cover, nesting, escape, foraging, brood-rearing and migration. Wildlife that use this allotment include upland game, waterfowl, game and non-game mammals,

neotropical migrants and raptors (Table 1). The State Priority Habitats on the allotment include cliff and talus slopes, stream, riparian and grassland/shrub-steppe. These areas comprise over 90 percent of the allotment.

<u>Special Status Species</u>: No federally listed Threatened or Endangered species are known to occur on the Packer Creek allotment. The area lies within the historic range for greater sage-grouse (Federally petitioned to propose and State Threatened), but this species is not currently known to occupy the area. Columbian sharp-tailed grouse (Federal Species of Concern, State Threatened) have not been documented on the Packer Creek allotment, although the riparian vegetation is considered suitable winter habitat. The allotment contains nesting habitat for the burrowing owl (State Candidate, BLM Tracking species). Burrowing owls attempted to nest and produce young in 1999 and 2000, although were unsuccessful both years. No owls were observed during 2001 surveys.

<u>Riparian/Wetland Habitat:</u> Riparian areas function as key wildlife habitat in many ecosystems. They usually contain high wildlife diversity and densities, provide important breeding habitat and seasonal ranges, and are utilized as key movement corridors. Neotropical migrants, for example, rely on riparian areas for nesting and brood rearing. Other wildlife (including mule deer, waterfowl and amphibian species) utilize the riparian/wetland habitat.

Historically, riparian areas on the Packer Creek allotment were impacted by channelization, irrigation diversions, livestock use, and other agricultural practices. Two miles of Packer Creek occur on the allotment, of which approximately 1/4 mile currently supports shrubs or trees in the riparian corridor. Woody vegetation in wetland/pond areas and creek riparian areas is primarily composed of water birch, black hawthorn, Wood's rose and quaking aspen. Reed canary grass dominates the riparian areas with the rest of the species composed of quackgrass, rush, hardstem bulrush and cattails.

Impacts on Wildlife Habitat

<u>Alternatives 1 and 2</u>: The grazing management proposed in these alternatives would maintain suitable habitat for wildlife species of concern. The grazing system proposed under these alternatives is expected to provide better control of livestock use, requiring cattle removal before adverse impacts occur to important wildlife habitat. Overall, livestock utilization levels and timing of grazing would be consistent with wildlife values to minimize disturbance during the majority of important nesting/brood rearing and fawning time frames (mid-March through mid-July). Grazing is preferable to a no grazing alternative for maintenance of burrowing owl habitat, requiring low vegetative cover and good visual obscurity for predator detection.

<u>Alternative 3 (No Grazing)</u>: The consequences under this alternative for wildlife species would be similar to those discussed under Alternatives 1 and 2. Under Alternative 3, the absence of grazing may expedite recovery and recruitment of habitat in wetland areas, uplands, and shrub pockets.

Cultural Resources/Native American Values

This allotment is located near the intersection of territories traditionally used by the Sahaptin-speaking Palus and the Salish-speaking Spokane and Columbia peoples. This area is designated as the "Plateau Culture Area." The area's aboriginal cultures share numerous broad cultural traits, such as a strong riverine orientation, a pattern of seasonal movement, and the sharing of resource areas by members of several groups.

The most visible native settlements were located along major rivers, but seasonal food gathering activities took most people into the Channeled Scablands for part of the spring and summer. Many areas that historically provided significant food resources are still used by native people. Resources present in this area include edible roots (several *Lomatium* species, bitterroot; onions and yellow bell), fruits such as service berries and chokecherries, and game animals. Because territorial "boundaries" in the Plateau's uplands were generally not well defined, this area's resources were likely shared by members of several neighboring groups including the Palus, the Spokane, the Columbia, and possibly the Sanpoil-Nespelem. In addition to the native foods harvested in the uplands, this area offers access to a wetland environment. Camas, an important food plant, is found in damp environments and may have been present here prior to grazing.

The "Texas Road" (an early historic travel route) crosses Section 30 on or near the allotment's northwest boundary and runs through or near the allotment in Section 31 where it divides, branching to the east, but with the main road continuing northeast. The branch road appears to be located in the allotment.

Public land records indicate that portions of Section 30, 31, and 32 were homesteaded in the first decade of the 20th Century. The Chicago, Milwaukee, and St. Paul Railroad (later the Chicago, Milwaukee, St. Paul, and Pacific) constructed track passing through the southeast corner of the allotment in the early 1900s. A railroad construction camp with a stone oven in the allotment has been identified by the former owner, but has not been recorded. A second railroad camp is said to be located nearby, but its location in relation to the allotment is not known. Except for the route of a recent fence line in Section 31, the allotment has not been surveyed for cultural resources. Several rock features and possible rock shelters have been reported in this area.

Impacts on Cultural Resources/Native American Values

<u>Effects Common to Alternative 1 & 2:</u> Early summer grazing may result in removal of the distinctive above-ground portions of native food plants, making identification and harvest of such plants difficult. The proposed rotation (no more than one out of three years during the critical growth period of blue bunch wheatgrass) may partly mitigate this impact. The reported rock features are located on mesas not accessible by cattle and will not be affected. Any subsurface cultural resources could be damaged by livestock trampling and soil compaction

<u>Alternative 2:</u> Any habitat improvements involving ground disturbance would potentially disturb subsurface archaeological materials.

<u>Alternative 3:</u> Absence of grazing may result in changes in culturally significant plant populations and may reduce impacts to cultural resources.

Recreation

The Packer Creek allotment is located 45 minutes from Spokane and less than 15 miles south of Sprague. Upland bird, waterfowl, and deer hunting is the primary public use on this allotment. The unique terrain within this allotment is representative of the lasting effects that ancient volcanic flows and ice-age cataclysmic flood events had on this region. A visual highlight of this area is the large basalt columns.

Historically, this area was used for agricultural crop production and grazed by livestock. Future recreational use is expected to increase due to this area's scenic qualities and its close location to Sprague and other BLM-administered lands. Most recreational activities are expected to take place without conflict with grazing.

Impacts on Recreation

<u>Effects Common to Alternative 1 &2:</u> Deer-hunting (General season) begins in mid-October, which may conflict with the Fall/Winter (October 1 through December 31) grazing season, if that season is used.

Current cattle stocking levels and pasture utilization guidelines have resulted in few impacts on recreation in the past. Future conflicts between the different user groups and multiple uses are unlikely, but may increase due to projected increases in recreational use.

<u>Alternative 3 (No Grazing)</u>: There are no anticipated impacts.

Cumulative Impacts

Region-wide conversion of native grasslands to intensive agriculture such as farming, and degradation of rangelands from long grazing seasons and/or high livestock numbers, has reduced the availability of suitable habitat for Spalding's catchfly. The presence of invasive species on neighboring lands, and the use of chemical herbicides to control those invasive plants, also represents a potential threat to these and other native species. Fragmentation of habitat, resulting in reduced opportunities for gene flow among populations, can result in loss of genetic diversity and the population may experience inbreeding depression (Lesica 1993).

Other Resource Elements Analyzed

<u>Environmental Justice</u>: No disproportionately high and adverse human health or environmental effects on minority or low-income populations are expected to result from implementation of any of the alternatives addressed in this EA.

Socioeconomics: Alternative 3 (No Grazing) would result in a loss of 642 AUMs to the grazing lessee.

<u>Other Resources Considered</u>: Other resource values or elements considered in analyzing the alternatives included:

- Air quality
- Wild and scenic rivers
- Prime/unique farmlands
- Special area designations
- Wilderness
- Hazardous/solid materials

Air quality would not be affected, and none of the other elements listed above occur on the allotment or would be affected.

Coordination

Yakama Indian Nation

Spokane Tribe of Indians

Nez Perce Tribal Executive Committee

Coeur d' Alene Tribe

Confederated Tribes of the Colville Reservation

Spokane Tribe of Indians

Grazing Lease Applicant (Mike Bailey)

Washington State Office of Archaeology and Historic Preservation

Washington State Department of Natural Resources

U.S. Fish and Wildlife Service

Washington Department of Fish and Wildlife

Literature Cited

- Lesica, P. 1993. Loss of fitness resulting from pollinator exclusion in *Silene spaldingii* (Caryophyllaceae). Madrono 40: 193-201.
- Lesica, P. 1997. Demography of the endangered plant, *Silene spaldingii* (Caryophyllaceae) in northwest Montana. Madrono 44: 347-358.
- USDI, Bureau of Land Management, 1999. Photographic guide to median stubble heights. TB 99-01. Idaho Bureau of Land Management, Salmon, ID.
- USDI, Bureau of Land Management, 1997. Standards for rangeland health and guidelines for livestock grazing management for public lands administered by the Bureau of Land Management in the states of Oregon and Washington. Oregon Bureau of Land Management, Portland, OR. 22 p.

Table 1. Wildlife Species Sightings on the Packer Creek Allotment (#00698) During 1999 Surveys.

* = Species of Concern

Mammals

American badger (Taxidea taxus)

Bushytail woodrat (scat, nests) (*Neotoma cinerea*)

Columbian ground squirrel (Spermophilus columbianus)

Coyote (Canis latrans)

Mountain cottontail (Sylvilagus nuttallii)

Mule deer (Odocoileus hemionus)

Porcupine (scat, holes) (*Erethizon dorsatum*)

Yellow-bellied marmot (Marmota flaviventris)

Amphibians

Columbian spotted frog (adults, egg masses)

(Rana pretiosa)*

(Ambystoma macrodactylum)

Pacific treefrog (egg masses) (*Pseudacris regilla*)

Tiger salamander (eggs) (Ambystoma tigrinum)*

Birds

American coot (Fulica amicana)

American kestrel (Falco americana)

American robin (*Turdus migratorius*)

American widgeon (*Anas americana*)

Black billed magpie (*Pica pica*)

Black tern (Chlidonias niger)*

Brewer's blackbird (*Euphagus cyanocephalus*)

Brown headed cowbird (*Molothrus ater*)

Burrowing owl (Athene cunicularia)*

Canada goose (Branta canadensis)

California quail (Callipepla californicus)

Cinnamon teal (*Anas cyanoptera*)

Cliff swallow (*Petrochelidon pyrrhonta*)

Common snipe (Gallinago gallinago)

Eastern kingbird (*Tyrannus tyrannus*)

Gadwall (*Anas strepera*)

Golden eagle (Aquila chrysaetos)*

Gray partridge (*Perdix perdix*)

Green-winged teal (*Anas crecca*)

Horned lark (*Eremophila alpestris*)

Killdeer (Charadruis vociferous)

Mallard (*Anas platyrhynchos*)

Marsh wren (Catherpes mexicana)

Mourning dove (*Zenaida macroura*)

Northern harrier (Circus cyaneus)

Northern shoveler (*Anas clypeata*)

Redhead (*Aythya americana*)

Red-winged blackbird (*Agelaius phoeniceus*)

Red-tailed hawk (Buteo jamaicensis)

Ring-billed gull (*Larus delawarensis*)

Ring-necked pheasant (Phasianus colchicus)

Rock dove (Columbia livia)

Ruddy duck (Oxyura jamaicensis)

Savannah sparrow (*Passerculus sandwichensis*)

Song sparrow (Melospiza melodia)

Sora (Porzana carolina)

Vesper sparrow (Pooecetes gramineus)

Violet-green swallow (*Tachycineta thalassina*)

Western meadowlark (Sturnella neglecta)

White-crowned sparrow (*Zonotrichia leucophrys*)

Wilson's warbler (Wilsonia pusilla)

Yellow-headed blackbird

(Xanthocephalus xanthocephalus)

Long toed salamander (egg masses)

Reptiles:

Common garter snake (*Thamnophis sirtalis*)